



SOUTHEAST GAP ANALYSIS PROJECT



Species Modeling Report

Eastern Gray Squirrel

Sciurus carolinensis

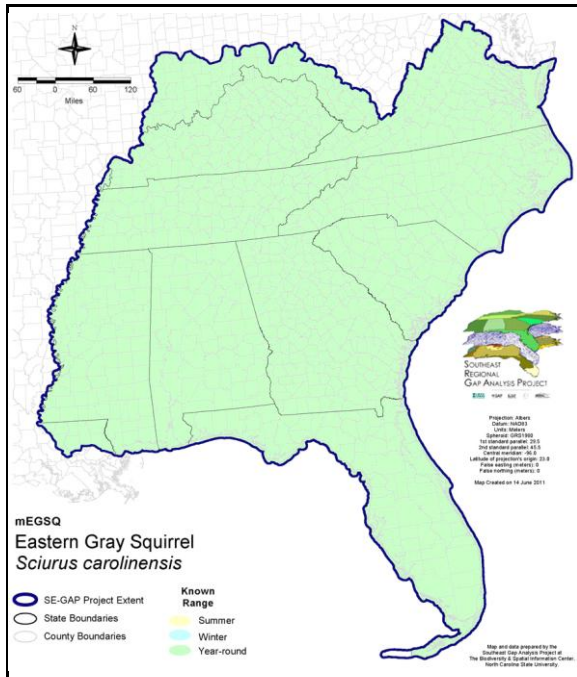
Taxa: Mammalian
 Order: Rodentia
 Family: Sciuridae

SE-GAP Spp Code: **mEGSQ**

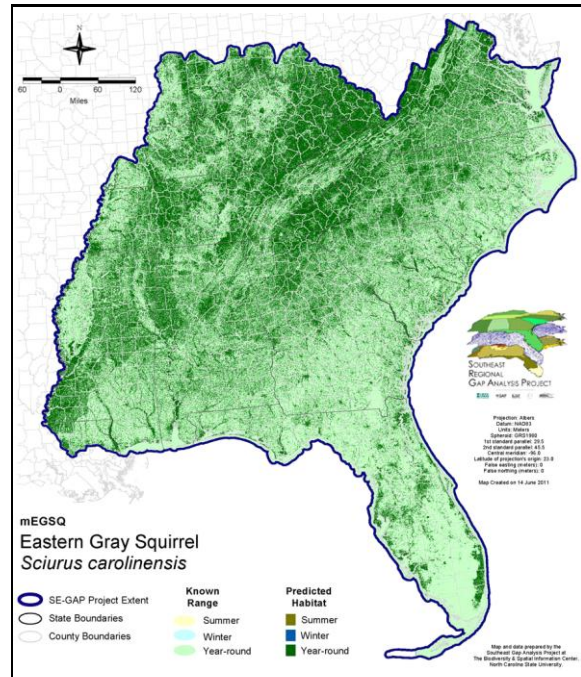
ITIS Species Code: 180175

NatureServe Element Code: AMAFB07010

KNOWN RANGE:



PREDICTED HABITAT:



Range Map Link: http://www.basic.ncsu.edu/segap/datazip/maps/SE_Range_mEGSQ.pdf

Predicted Habitat Map Link: http://www.basic.ncsu.edu/segap/datazip/maps/SE_Dist_mEGSQ.pdf

GAP Online Tool Link: <http://www.gapservice.ncsu.edu/segap/segap/index2.php?species=mEGSQ>

Data Download: http://www.basic.ncsu.edu/segap/datazip/region/vert/mEGSQ_se00.zip

PROTECTION STATUS:

Reported on March 14, 2011

Federal Status: ---

State Status: AL (GA), KY (N), NY (GS), RI (Not Listed), BC (7 (2005)), QC (Non suivie)

NS Global Rank: G5

NS State Rank: AL (S5), AR (S5), CT (S5), DC (S5), DE (S5), FL (SNR), GA (S5), IA (S5), ID (SNA), IL (S5), IN (S4), KS (S5), KY (S5), LA (S5), MA (S5), MD (S5), ME (S5), MI (S5), MN (SNR), MO (SNR), MS (S5), MT (SNA), NC (S5), ND (SNR), NE (S3), NH (S5), NJ (S5), NY (S5), OH (SNR), OK (S5), OR (SNA), PA (S5), RI (S5), SC (SNR), SD (SU), TN (S5), TX (S5), VA (S5), VT (S5), WA (SNA), WI (S5), WV (S5), AB (SNA), BC (SNA), MB (S5), NB (S5), NS (SNA), ON (S5), QC (S5), SK (SNA)

SUMMARY OF PREDICTED HABITAT BY MANAGMENT AND GAP PROTECTION STATUS:

	US FWS		US Forest Service		Tenn. Valley Author.		US DOD/ACOE	
	ha	%	ha	%	ha	%	ha	%
Status 1	50,568.7	< 1	33,528.0	< 1	0.0	0	0.0	0
Status 2	120,569.1	< 1	368,688.2	< 1	0.0	0	4,713.1	< 1
Status 3	3,053.2	< 1	2,066,132.9	4	53,304.9	< 1	376,380.8	< 1
Status 4	67.5	< 1	0.0	0	0.0	0	310.9	< 1
Total	174,258.5	< 1	2,468,349.1	5	53,304.9	< 1	381,404.8	< 1
	US Dept. of Energy		US Nat. Park Service		NOAA		Other Federal Lands	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	290,338.9	< 1	70.3	< 1	7,650.3	< 1
Status 2	0.0	0	21,626.8	< 1	6,876.3	< 1	23.9	< 1
Status 3	31,913.4	< 1	118,929.5	< 1	0.0	0	2,930.9	< 1
Status 4	0.0	0	1.0	3	0.0	0	0.0	0
Total	31,913.4	< 1	430,896.8	< 1	6,946.6	< 1	10,605.1	< 1
	Native Am. Reserv.		State Park/Hist. Park		State WMA/Gameland		State Forest	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	1,276.7	< 1	72.0	< 1	0.0	0
Status 2	0.0	0	17,971.3	< 1	541,595.9	1	1,440.5	< 1
Status 3	25,511.0	< 1	289,836.7	< 1	171,585.9	< 1	98,428.4	< 1
Status 4	0.0	0	0.0	0	68,308.7	< 1	12.2	< 1
Total	25,511.0	< 1	309,084.7	< 1	781,562.5	2	99,881.0	< 1
	State Coastal Reserve		ST Nat.Area/Preserve		Other State Lands		Private Cons. Easemt.	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	13,590.2	< 1	0.0	0	0.0	0
Status 2	7,138.7	< 1	76,490.1	< 1	5.0	< 1	1,652.9	< 1
Status 3	0.0	0	8,099.9	< 1	9,862.4	< 1	36,814.7	< 1
Status 4	0.0	0	2.1	< 1	2,489.8	< 1	0.0	0
Total	7,138.7	< 1	98,182.3	< 1	12,357.2	< 1	38,467.5	< 1
	Private Land - No Res.		Water		Overall Total			
	ha	%	ha	%	ha	%		
Status 1	0.0	0	0.0	0	397,094.9	< 1		
Status 2	0.0	0	0.0	3	1,168,792.0	2		
Status 3	496.6	< 1	0.0	0	3,293,281.2	11		
Status 4	42,019,490.4	86	46,742.4	< 1	42,205,666.7	86		
Total	42,019,987.1	86	46,742.6	< 1	47,064,834.8	100		

GAP Status 1: An area having permanent protection from conversion of natural land cover and a mandated management plan in operation to maintain a natural state within which disturbance events (of natural type, frequency, and intensity) are allowed to proceed without interference or are mimicked through management.

GAP Status 2: An area having permanent protection from conversion of natural land cover and a mandated management plan in operation to maintain a primarily natural state, but which may receive use or management practices that degrade the quality of existing natural communities.

GAP Status 3: An area having permanent protection from conversion of natural land cover for the majority of the area, but subject to extractive uses of either a broad, low-intensity type or localized intense type. It also confers protection to federally listed endangered and threatened species throughout the area.

GAP Status 4: Lack of irrevocable easement or mandate to prevent conversion of natural habitat types to anthropogenic habitat types. Allows for intensive use throughout the tract. Also includes those tracts for which the existence of such restrictions or sufficient information to establish a higher status is unknown.

PREDICTED HABITAT MODEL(S):

Year-round Model:

Habitat Description: Common to abundant, gray squirrels are primarily arboreal and they occupy a variety of forested habitats including mature hardwood forest with dense undergrowth, river bottoms, mixed forest, and dense or mature stands of oak and hickory. Gray squirrels also thrive in suburban and residential areas where there are trees. They occur less in young forests and are seldom far from permanent open water. A diversity of nut trees is needed to support high densities. Narrow bands of hardwoods along ephemeral streams are an important component of the habitat in even-aged pine and mixed pine-hardwood stands (Fischer and Holler 1991). Also found in all types of hammock habitat, savannahs, cypress, palm, coastal scrub and swamps (Fernald 1989; Layne 1984; Ivey 1959; Moore 1949). In Virginia, telemetry and live-trapping minimum home range showed the male home averaged 0.53 ha and those of females averaged 0.40 ha (Doebel and McGinnes 1974). Most winter-spring litters are born in tree cavities and most spring-summer litters are born in leaf nests (Teaford 1986). A first litter is produced mostly in February-March and a second litter may be born in July or August. Gestation lasts 44 days. Litter size most often is 2-3. Most gray squirrels breed as yearlings and the reproductive output, including the percentage of adults that produce young and the number of litters/year, is positively correlated with mast abundance. Their maximum reproductive longevity is about a decade. Stacy Smith, 17June05

Selected Map Units:

Functional Group	Map Unit Name
Anthropogenic	Developed Open Space
Anthropogenic	Low Intensity Developed
Anthropogenic	Medium Intensity Developed
Forest/Woodland	Alabama Ketona Glade and Woodland
Forest/Woodland	Allegheny-Cumberland Dry Oak Forest and Woodland
Forest/Woodland	Allegheny-Cumberland Dry Oak Forest and Woodland - Hardwood Modifier
Forest/Woodland	Appalachian Hemlock-Hardwood Forest
Forest/Woodland	Atlantic Coastal Plain Central Maritime Forest
Forest/Woodland	Atlantic Coastal Plain Dry and Dry-Mesic Oak Forest
Forest/Woodland	Atlantic Coastal Plain Fall-line Sandhills Longleaf Pine Woodland - Offsite Hardwood Modifier
Forest/Woodland	Atlantic Coastal Plain Mesic Hardwood and Mixed Forest
Forest/Woodland	Atlantic Coastal Plain Northern Maritime Forest
Forest/Woodland	Atlantic Coastal Plain Northern Mixed Oak-Heath Forest
Forest/Woodland	Atlantic Coastal Plain Southern Maritime Forest
Forest/Woodland	Central and Southern Appalachian Montane Oak Forest
Forest/Woodland	Central and Southern Appalachian Northern Hardwood Forest
Forest/Woodland	Central Appalachian Oak and Pine Forest
Forest/Woodland	Central Appalachian Pine-Oak Rocky Woodland
Forest/Woodland	Central Interior Highlands Calcareous Glade and Barrens
Forest/Woodland	Central Interior Highlands Dry Acidic Glade and Barrens
Forest/Woodland	East Gulf Coastal Plain Interior Shortleaf Pine-Oak Forest - Hardwood Modifier
Forest/Woodland	East Gulf Coastal Plain Interior Shortleaf Pine-Oak Forest - Mixed Modifier
Forest/Woodland	East Gulf Coastal Plain Interior Shortleaf Pine-Oak Forest - Pine Modifier
Forest/Woodland	East Gulf Coastal Plain Interior Upland Longleaf Pine Woodland - Offsite Hardwood Modifier
Forest/Woodland	East Gulf Coastal Plain Limestone Forest
Forest/Woodland	East Gulf Coastal Plain Maritime Forest
Forest/Woodland	East Gulf Coastal Plain Northern Dry Upland Hardwood Forest
Forest/Woodland	East Gulf Coastal Plain Northern Loess Bluff Forest
Forest/Woodland	East Gulf Coastal Plain Northern Loess Plain Oak-Hickory Upland - Hardwood Modifier
Forest/Woodland	East Gulf Coastal Plain Northern Loess Plain Oak-Hickory Upland - Juniper Modifier
Forest/Woodland	East Gulf Coastal Plain Northern Mesic Hardwood Forest
Forest/Woodland	East Gulf Coastal Plain Southern Loess Bluff Forest
Forest/Woodland	East Gulf Coastal Plain Southern Mesic Slope Forest
Forest/Woodland	Mississippi Delta Maritime Forest
Forest/Woodland	Northeastern Interior Dry Oak Forest - Mixed Modifier

Forest/Woodland	Northeastern Interior Dry Oak Forest - Virginia/Pitch Pine Modifier
Forest/Woodland	Northeastern Interior Dry Oak Forest-Hardwood Modifier
Forest/Woodland	Northern Atlantic Coastal Plain Dry Hardwood Forest
Forest/Woodland	Ridge and Valley Calcareous Valley Bottom Glade and Woodland
Forest/Woodland	South-Central Interior Mesophytic Forest
Forest/Woodland	Southeast Florida Coastal Strand and Maritime Hammock
Forest/Woodland	Southern and Central Appalachian Cove Forest
Forest/Woodland	Southern and Central Appalachian Mafic Glade and Barrens
Forest/Woodland	Southern and Central Appalachian Oak Forest
Forest/Woodland	Southern and Central Appalachian Oak Forest - Xeric
Forest/Woodland	Southern Appalachian Montane Pine Forest and Woodland
Forest/Woodland	Southern Coastal Plain Dry Upland Hardwood Forest
Forest/Woodland	Southern Coastal Plain Oak Dome and Hammock
Forest/Woodland	Southern Interior Low Plateau Dry-Mesic Oak Forest
Forest/Woodland	Southern Interior Low Plateau Dry-Mesic Oak Forest - Evergreen Modifier
Forest/Woodland	Southern Piedmont Dry Oak-(Pine) Forest - Hardwood Modifier
Forest/Woodland	Southern Piedmont Dry Oak-(Pine) Forest - Loblolly Pine Modifier
Forest/Woodland	Southern Piedmont Dry Oak-(Pine) Forest - Mixed Modifier
Forest/Woodland	Southern Piedmont Dry Oak-Heath Forest - Hardwood Modifier
Forest/Woodland	Southern Piedmont Dry Oak-Heath Forest - Mixed Modifier
Forest/Woodland	Southern Piedmont Dry Oak-Heath Forest - Virginia/Pitch Pine Modifier
Forest/Woodland	Southern Piedmont Glade and Barrens
Forest/Woodland	Southern Piedmont Mafic Hardpan Woodland
Forest/Woodland	Southern Piedmont Mesic Forest
Forest/Woodland	Southern Piedmont Northern Triassic Basin Dry Forest
Forest/Woodland	Southern Ridge and Valley Dry Calcareous Forest
Forest/Woodland	Southern Ridge and Valley Dry Calcareous Forest - Hardwood Modifier
Forest/Woodland	Southwest Florida Coastal Strand and Maritime Hammock
Wetlands	Atlantic Coastal Plain Blackwater Stream Floodplain Forest - Forest Modifier
Wetlands	Atlantic Coastal Plain Blackwater Stream Floodplain Forest - Herbaceous Modifier
Wetlands	Atlantic Coastal Plain Brownwater Stream Floodplain Forest
Wetlands	Atlantic Coastal Plain Nonriverine Swamp and Wet Hardwood Forest - Oak Dominated Modifier
Wetlands	Atlantic Coastal Plain Northern Basin Swamp and Wet Hardwood Forest
Wetlands	Atlantic Coastal Plain Small Blackwater River Floodplain Forest
Wetlands	Atlantic Coastal Plain Small Brownwater River Floodplain Forest
Wetlands	Central Appalachian Floodplain - Forest Modifier
Wetlands	Central Appalachian Floodplain - Herbaceous Modifier
Wetlands	Central Appalachian Riparian - Forest Modifier
Wetlands	Central Appalachian Riparian - Herbaceous Modifier
Wetlands	East Gulf Coastal Plain Large River Floodplain Forest - Forest Modifier
Wetlands	East Gulf Coastal Plain Large River Floodplain Forest - Herbaceous Modifier
Wetlands	East Gulf Coastal Plain Small Stream and River Floodplain Forest
Wetlands	Lower Mississippi River Bottomland and Floodplain Forest
Wetlands	Lower Mississippi River Bottomland Depressions - Forest Modifier
Wetlands	Lower Mississippi River Bottomland Depressions - Herbaceous Modifier
Wetlands	Mississippi River Low Floodplain (Bottomland) Forest
Wetlands	Mississippi River Riparian Forest
Wetlands	South-Central Interior Large Floodplain - Forest Modifier
Wetlands	South-Central Interior Large Floodplain - Herbaceous Modifier
Wetlands	South-Central Interior Small Stream and Riparian
Wetlands	Southern Coastal Plain Blackwater River Floodplain Forest
Wetlands	Southern Piedmont Large Floodplain Forest - Forest Modifier
Wetlands	Southern Piedmont Large Floodplain Forest - Herbaceous Modifier
Wetlands	Southern Piedmont Small Floodplain and Riparian Forest

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